NEASTACILLA FALCLANDICA (OHLIN), TYPE SPECIES OF THE GENUS, AND N. TATTERSALLI, NEW SPECIES (CRUSTACEA: ISOPODA: ARCTURIDAE)

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Abstract. – Neastacilla falclandica (Ohlin) is redescribed and figured from topotypic material. It is shown to be different from material from New Zealand which Tattersall (1921) assigned to N. falclandica and on which he based the new genus Neastacilla. Tattersall's specimen and more recent material are described as a new species, N. tattersalli.

Tattersall (1921) erected the genus Neastacilla and recorded the type species, Astacilla falclandica Ohlin, from New Zealand. Comparison of Tattersall's specimen with topotypes from the Falkland Islands has revealed that Tattersall misidentified his specimen. As there is no modern description of Neastacilla falclandica a redescription was felt to be desirable and the New Zealand species should be described. It was not possible to locate the holotype of Astacilla falclandica in Hamburg, Berlin, or Stockholm, and it is presumed lost.

We are appealing to the International Commission for Zoological Nomenclature to rule that *Astacilla falclandica* Ohlin be type species of the genus *Neastacilla* to preserve current usage.

This contribution forms part of a larger work on Australian species of *Neastacilla* in which the genus is rediagnosed and contrasted with *Astacilla* Cordiner. The format of the descriptions of the two species described here follows that of the larger work in preparation. Mouthparts of *N. falclandica* are figured but these contribute little to generic distinctions.

Neastacilla falclandica (Ohlin) Figs. 1, 2

Astacilla falclandica Ohlin, 1907:266, pl. 20.-Schultz, 1981:91.

Astacilla falclandicus. – Stebbing, 1914:353. Neastacilla falclandica. – Nordenstam,

1933:119–122, fig. 28.–Kussakin, 1967: 357.–Sivertsen and Holthuis, 1980:67, fig. 18c.

Material examined. – Swedish Museum for Natural History, Stockholm, Isopoda 7305, female (6.2 mm), Falkland Islands, Port Louis, Swedish South Polar Expedition 1901–3, Station 43. USNM 222665, juvenile (3.1 mm), Falkland Islands, off Lighthouse, 22 Apr 1927. USNM 222666, juvenile (3.0 mm), Falkland Islands, Port Stanley, 14 Apr 1927, No. 107.

Description. - Female: Anterolateral lobe of head rounded, rostral point absent. Eyes subtriangular, slightly prominent in dorsal view. Fusion of head and first pereonite indicated by obsolete groove, incomplete dorsally and not extending to lateral margin; lateral margin not incised; combined length of head and pereonite 1 1.7 times combined length of pereonites 2 and 3. Lateral margin of pereonite 1 not expanded ventrally. Pereonites 2 and 3 subequal, smooth; lateral margins rounded, visible in dorsal view. Pereonite 4 one-third total body length, slightly wider than preceding perconites; anterolateral margins produced, rounded; dorsolateral margin produced ventrally. Pereonites 5-7 smooth, shorter posteriorly. Pleon smooth, 1.5 times combined lengths of pe-

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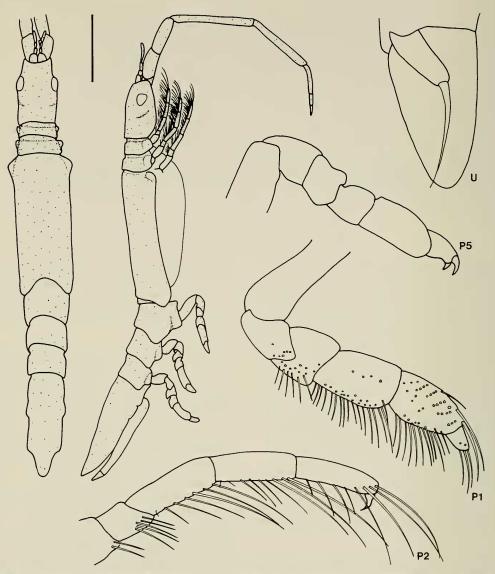


Fig. 1. Neastacilla falclandica, female, 6.2 mm (NHRM Isopoda 7305): P1, P2, P5, Pereopods 1, 2 and 5; U, Uropod. Scale = 1 mm.

reonites 5–7; profile a smooth slope. Two pleonal somites indicated by lateral indentations; in dorsal view, second pleonal somite protrudes laterally. Pleotelson with poorly developed posterolateral expansions, apex rounded but with steeply sloping sides.

Antenna 1 reaching one-third along article 3 of antenna 2. Antenna 2 almost twothirds body length, not excessively slender or stout; flagellum of 3 articles. Ratio of articles 3–5 1.0:2.1:1.1. Pereopod 1 dactyl with terminal setae, claw absent. Pereopods 2–4 of moderate build, densely setose; small claw-like dactyl present. Pereopod 5 with slight ventral expansion, barely more than pereopods 6 and 7; lacking marked ventral expansion. Pereopods 5–7 smooth, dactyl

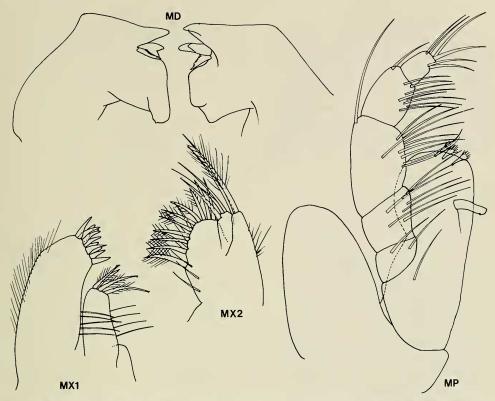


Fig. 2. Neastacilla falclandica, juvenile, 3.1 mm (USNM 222665): MD, Mandibles (left and right); MX1, MX2, Maxillae 1 and 2; MP, Maxilliped.

with 2 well-developed claws, larger claw half length of dactyl. Uropod outer ramus, length 1.7 times base width, apex rounded; inner ramus, distal margin with single stout seta reaching beyond distal margin of outer ramus.

Distribution.-Falkland Islands.

Remarks.—Mouthparts of this species are figured because it is the nominal type species of the genus.

Neastacilla tattersalli, new species Fig. 3

Neastacilla falclandica. – Tattersall, 1921: 244, pl. 10, fig. 1. – Hurley, 1961:264.

Material examined.—Holotype, British Museum (Natural History) 1921:11:29:316, female (8.9 mm), New Zealand, North Cape (34°25'S, 173°02'E), British Antarctic ("Terra Nova") Expedition station 96, 129 m. Paratypes, Zoological Museum, Copenhagen, female (7.8 mm), juvenile (3.2 mm), New Zealand, Hauraki Gulk, Kawau Island (36°25'S, 174°51'E), 10 fathoms, coll. Dr. Th. Mortensen, 29 Dec 1914.

Description. – Female: Anterolateral lobe of head angular, with small spine-like projection on ventral margin, rostral point small. Eyes large, ovoid, slightly prominent in dorsal view. Fusion of head and first pereonite indicated by poorly defined groove; lateral margin incised; combined length 1.7 times combined length of pereonites 2 and 3. Pereonite 1 smooth, lateral margin not expanded ventrally. Pereonites 2 and 3 subequal, smooth; lateral margins visible in dorsal view. Pereonite 4 less than one-third total body length, smooth; not markedly wider than preceding pereonites. Antero-

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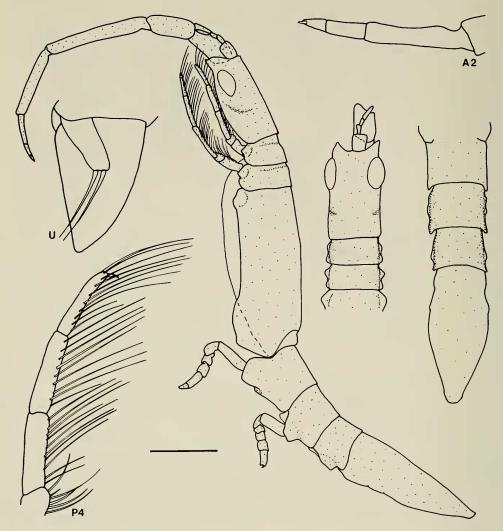


Fig. 3. Neastacilla tattersalli, holotype: A2, Antenna 2 flagellum; P4, Pereopod 4; U, Uropod. Scale = 1 mm.

lateral margins produced, rounded. Dorsolateral margin angular, produced ventrally in posterior one-third of pereonite. Pereonites 5–7 smooth, progressively shorter posteriorly. Pleon longer than pereonites 5–7 combined, smooth, profile a smooth slope; 2 pleonal somites indicated by obsolete lateral grooves. Pleotelson tapering to truncate apex, posterolateral expansions absent.

Antenna 1 reaching distal margin of ar-

ticle 2 of antenna 2. Antenna 2 little over half body length, not excessively slender or stout; flagellum of 3 articles. Ratio of articles 3–5 1.0:2.0:1.5. Pereopod 1 dactyl with terminal setae, claw absent. Pereopods 2–4 of moderate build, densely setose; dactyl present. Oostegites on pereopods 1–4. Pereopod 5 coxa with slight ventral expansion, barely more than pereopods 6 and 7. Pereopods 5–7 smooth, dactyl with 2 welldeveloped claws, larger claw as long as dactyl. Uropod outer ramus length approximately 1.5 times base width, apex angular; inner ramus less than half length of outer ramus, distal margin with 2 subequal setae; setae reach distal margin of outer ramus.

Distribution. – Northern North Island of New Zealand.

Remarks.—The holotype specimen is in poor condition with mouthparts and several limbs, including percopod 1, missing. Examination of the paratypes which bear pereopod 1 confirm the species' generic placement. Although only three specimens were examined some variation was observed. The distinct spine on the anterolateral lobe of the head of the holotype is absent from the other specimens.

This is one of few species of *Neastacilla* in which the females lack spines and tubercles. It most closely resembles *Neastacilla falclandica*. The most obvious differences separating the two are the size and shape of the eye, the number of setae on the inner ramus of the uropods, and the shape of the pleotelson.

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